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10/697,174	10/30/2003	Jonathan Levene	SNS-016	8152

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EXAMINER

AMIN, JWALANT B

ART UNIT	PAPER NUMBER
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2628

DATE MAILED: 12/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/697,174	Applicant(s) LEVENE ET AL.	
	Examiner Jwalant Amin	Art Unit 2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 and 20-45 is/are rejected.
- 7) ☐ Claim(s) 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 November 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>10/27/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-45 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

3. Regarding independent claims 1, 35 and 42, the language of the claims raise questions as to whether the claims are directed merely to a functional descriptive material that shows no practical application which produces concrete, tangible and useful result to form the basis of statutory subject matter under 35 U.S.C. 101.

Specifically, the method of protecting a selected region of an image from subsequent editing as disclosed in claims 1 and 42, and the method of blending a brush stroke into a target image as disclosed in claim 35 are the abstract ideas, which would be implemented without use of any type of machine. See MPEP 2106 IV (B)(1).

4. Claims 2-34, 36-41 and 43-45 are dependent on independent claims 1, 35 and 42 respectively, and therefore the examiner gives the same reasons as stated above.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adobe Press ("Adobe Photoshop 7.0 Classroom in a Book", 6/25/2002; hereinafter referred to as Adobe), and further in view of Swanson Tech Support ("Photoshop Techniques 004: How to use Postscript Art as a Stencil in Photoshop", 1994; hereinafter referred to as Swanson).

7. Regarding claim 1, Adobe teaches a method of protecting a selected region of an image from subsequent editing (working with layers in Adobe Photoshop facilitates editing/deleting the current layer without affect the other layers; e.g. background garden image is one layer and the door image with white surrounding area is another layer; when removing the white area around the door, the background garden image layer is not affected); a first texture (opening Door.psd file that contains the door image) and a protected image (background garden image) (pg. 131-137).

Although Adobe discloses the claimed limitations as stated above, Adobe does not explicitly teach creating a first texture comprising a plurality of pixels each with an assigned scalar value indicating a level of protection for a corresponding pixel of a protected image; directing graphical input into a second texture, wherein the protected image is at least initially unedited by the graphical input; modifying a value of at least one pixel of the second texture using the first texture; and blending at least one pixel of the second texture into the protected image. However, Swanson (step 2A-2C, 3A-3B, pg. 1-3) teaches to open a mask image (creating first texture comprising a plurality of pixels in a layer) in a new document (the brick image in a different layer acts as the

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protected image, where each pixel of the mask image has an opacity value (scalar value) that indicates the opacity/transparency of the mask image). Swanson further teaches to click on the normal mode icon to convert the mask into a selection outline, and use paint tools to paint and color inside the selection outline (user uses a paint brush as displayed in fig. 3B as a graphical input; the layer on which the drawing occurs inside the selection outline acts as the second texture, and therefore the users directs the paint brush strokes by drawing into the second texture; since second texture is a different layer than the protected brick image, the brick image is not affected by the drawing using the paint brush strokes). Swanson further teaches that when the paint from the paintbrush tool is applied on the layer of the second texture in the selection outline, the shape of the mask image layer (first texture) appears with every brush stroke, and thus changing the values of corresponding pixels of the second texture layer (fig. 3A and fig. 3B, pg. 3). Swanson also teaches to blend the layer of the second texture, which is painted using the paintbrush tool with the protected layer of brick image, and thus finally forming the image as displayed in step 3B. Therefore, it would have been obvious to one of ordinary skill in the art at the time of present invention to use the Quick Mask mode icon as taught by Swanson into the Adobe Photoshop tool of Adobe because placing the stencil graphics onto the Quick Mask and painting away with Photoshop's Airbrush tool in Normal mode, the color will stay neatly trimmed inside of the stencil shape (pg. 2 Photoshop 2.5's Quick Mask feature).

8. Regarding claim 2, Adobe teaches the graphical input represents a plurality of brush strokes performed by a user (short strokes using the healing brush tool, pg. 202).

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9. Regarding claim 3, Adobe teaches the plurality of brush strokes comprises at least one overlapping portion (two or more overlapping brush strokes are visible in the figures on pg. 231).
10. Regarding claim 4, Adobe teaches at least one overlapping portion corresponds to an area overlapped by a plurality of brush strokes (the overlapping portion resulted by dragging the brush a particular area corresponds to an area overlapped by a plurality of brush strokes, pg. 231).
11. Regarding claim 5, Adobe teaches the plurality of brush strokes comprises at least one member selected from the group consisting of a paint stroke, an erase stroke, a pencil stroke, a pen stroke, a line application, a character application, a text application, a batch deletion, a batch paste, and a flood fill (1-1 Toolbox overview; eraser tool and the magic eraser tool performs the erase stroke, brush tool performs the brush stroke).
12. Regarding claim 6, Adobe teaches the graphical input corresponds to a movement of a user (pg. 136; the user selected the magic eraser tool).
13. Regarding claim 7, Adobe teaches assigning scalar values (opacity, pg. 225) to pixels of a scratch texture (when selecting the brush, the texture attached with the brush by selecting the texture option corresponds to the scratch texture, pg. 167) that corresponds to a transition region at one or more edges of a brush stroke (smoothing the edges of a stroke, pg. 225).
14. Regarding claim 8, Adobe teaches a graphical input comprising a scratch texture (when selecting the brush, the texture attached with the brush by selecting the texture

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option corresponds to the scratch texture, pg. 167; when a brush from the blur tool is selected, the texture attached with the blur tool brush is the scratch texture, pg. 225) representing a brush stroke (blur tool brush) and blends the scratch texture into the second texture (highlight layer) substantially upon completion of the brush stroke (blur tool is used to soften the edges of the paint strokes, smoothing out the color transition by dragging the blur brush tool over the shadows and highlights of the highlight layer, and thus blending the paint applied from the blur tool brush with the highlight layer to soften the color transition, pg. 225).

15. Regarding claim 9, Adobe teaches the step of blending the scratch texture into the second texture comprises performing a compositing operation (pg. 223-225, when a brush stroke with blur texture (acts as scratch texture) is dragged over the highlight layer (acts as second texture) to soften the color transitions, and this is achieved by compositing the paint from the blur tool brush and the highlight layer; adjusting the strength option while blurring the image controls the degree of compositing, pg. 220-225).

16. Regarding claim 10, Adobe teaches the compositing operation is an overlay operation (pg. 225, when the blur tool brush is dragged over the highlight layer, it overlays the paint from the blur tool brush onto the highlight layer to soften the color transitions) performed with pixels of A and B, where A comprises pixels having a paint color attenuated by the scratch texture (blur tool brush having paint color) and B comprises the second texture (highlight layer).

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17. Regarding claim 11, Adobe teaches comparing a candidate scalar value from received data (opacity value of the highlight layer) to an existing scalar value at a corresponding pixel of the scratch texture (opacity value of the paint from the blur tool brush; pg. 223-225, the opacity of the highlight layer is checked and if it is transparent, then those transparent pixels will be unaffected, but if it is not transparent then it is compared with the opacity value of the blur tool brush to determine the blending factor); and assigning the candidate scalar value to the corresponding pixel of the scratch texture only if the candidate scalar value exceeds the existing scalar value (when the opacity of the highlight layer is set to transparent, it is assigned to the blur tool brush so that that pixel of the highlight layer is unaffected).

18. Regarding claim 12, Adobe teaches the graphical input represents at least one brush stroke performed by a user (short strokes using the healing brush tool, pg. 202). Adobe further teaches an overlapping portion by a plurality of brush strokes (two or more overlapping brush strokes are visible in the figures on pg. 231), and that a random pattern could be created until the user is satisfied with the result (pg. 245). Although Adobe does not explicitly teach the at least one brush stroke comprises at least one overlapping portion corresponding to an area of a single brush stroke that overlaps itself, it would have been obvious to one of ordinary skill in the art at the time of present invention to draw a brush stroke overlapping itself to create some random pattern because overlapping a brush stroke with itself helps to create random patterns that satisfies the user by achieving the desired results (pg. 245).

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19. Regarding claim 13, Adobe teaches all of the claimed limitations as stated above, except that Adobe does not explicitly teach copying at least one pixel of the protected image into a display image; and blending at least one pixel of the second texture into the display image. However, Swanson (pg. 1-3) teaches to copy at least one pixel of the protected image (brick image layer) into a display image (display image is any image that is visible to the user/viewer on the display screen, figure represented by steps 2A-2C shows the protected brick image layer as the display image; when a new document is created in Photoshop, the brick image layer is read (copied) into the memory for display); and blending at least one pixel of the second texture into the display image (since the display image is same the protected image at this point, blending the second texture with the display image is same as blending the second texture with the protected image; please refer to claim 1 for further details regarding blending the second texture with the protected image). Therefore, it would have been obvious to one of ordinary skill in the art at the time of present invention to blend the second texture by painting and coloring the display image as taught by Swanson into the Photoshop program of Adobe because displaying the image will allow the user to paint inside the selection outside with reckless abandon (pg. 3 last paragraph).

20. Regarding claim 14, although Adobe teaches all of the claimed limitations as stated above, Adobe does not explicitly teach that the step (e) and (f) are performed prior to step (d). However, Swanson teaches that the protected image is same as the display image (see rejection of claim 13 for further details). Swanson also teaches that when the first brush stroke is applied, step d is performed. However, when the second

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brush stroke is applied steps e and f are performed prior to step d since the blending with the second texture is performed first on the display image, and also as the display image is same as the protected image, similar blending needs to be updated on the protected image (pg. 1-3; steps d, e and f are performed in a loop for all the strokes except the first paint stroke). Therefore, it would have been obvious to one of ordinary skill in the art at the time of present invention to perform steps e and f prior to step d as taught by Swanson and use it into the Photoshop program of Adobe because updating the display image by applying paint also requires to update the protected image to perform this interactive operation in real-time.

21. Regarding claim 15, although Adobe teaches all of the claimed limitations as stated above, Adobe does not explicitly teach that at least one of step (c) and step (f) proceeds pixel-by-pixel as the second texture accumulates graphical input. However, Swanson teaches that when the paint from the paintbrush tool is applied on the layer of the second texture in the selection outline, the shape of the mask image layer (first texture) appears with every brush stroke, and thus changing the values of corresponding pixels of the second texture layer where the brush stroke is applied (pg. 3).

22. Regarding claim 16, the statements provided above, with respect to claims 1, 13, 14 and 15, are incorporated herein.

23. Regarding claim 17, Adobe teaches the graphical input representing at least one erase stroke performed by a user (selecting magic eraser tool erases the white area surrounding the door image, pg. 136).

24. Regarding claim 18, although Adobe teaches all of the claimed limitations as stated above, Adobe does not explicitly disclose modifying a value of at least one pixel in the protected image using the first texture. However, Swanson teaches to click on the Normal mode icon to modify the pixel values of the protected brick image by converting the mask image into a selection outline (when the user clicks on the normal mode icon, the brick image is displayed by converting the mask image into a selection outline). Therefore, it would have been obvious for one of ordinary skill in the art at the time of present invention to modifying the pixel value of a protected image as taught by Swanson and use it into the Photoshop program of Adobe because Photoshop will allow a user to use the mask shape as a stencil to spray-paint inside it to create logos or layouts (pg. 1).

25. Regarding claim 20, Adobe teaches the graphical input represents at least one paint stroke (paint with short, downward strokes, pg. 236) and at least one erase stroke performed by a user (selecting magic eraser tool erases the white area surrounding the door image, pg. 136).

26. Regarding claim 21, although Adobe teaches all of the claimed limitations as stated above, Adobe does not explicitly disclose attenuating values of pixels of the second texture using values of corresponding pixels in the first texture. However, Swanson teaches to paint the selection outside of the second texture and thereby making the mask image of the first texture appear with every brush stroke (pg. 3; with every brush stroke paint is applied to the second texture and the first texture starts reappearing from beneath the layer of the second texture by attenuating the pixel values

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of the corresponding second texture using the pixel values of the first texture, where each brush stroke is applied). Therefore, it would have been obvious to one of ordinary skill in the art at the time of present invention modifying pixel values of the top-layered second texture using the corresponding pixel values of the bottom-layered first texture as taught by Swanson and use it into the Photoshop program of Adobe because trimming the color neatly inside the original shape allows to draw inside of the selection outside with reckless abandon (pg. 3 last paragraph).

27. Regarding claim 22, although Adobe teaches all of the claimed limitations as stated above, Adobe does not explicitly disclose step (d) comprises performing a compositing operation. However, Swanson teaches to blend (compositing operation) the layer of the second texture, which is painted using the paintbrush tool with the protected layer of brick image by overlaying the second texture layer on the protected image layer, and thus finally forming the image as displayed in step 3B. Therefore, it would have been obvious to one of ordinary skill in the art at the time of present invention to use the Quick Mask mode icon as taught by Swanson into the Adobe Photoshop tool of Adobe because placing the stencil graphics onto the Quick Mask and painting away with Photoshop's Airbrush tool in Normal mode, the color will stay neatly trimmed inside of the stencil shape (pg. 2 Photoshop 2.5's Quick Mask feature).

28. Regarding claim 23, although Adobe teaches all of the claimed limitations as stated above, Adobe does not explicitly disclose the compositing operation is an overlay operation performed with pixels of A and B, where A comprises the second texture and B comprises the protected image. However, Swanson teaches to blend (compositing

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operation) the layer of the second texture, which is painted using the paintbrush tool with the protected layer of brick image by overlaying the second texture layer on the protected image layer, and thus finally forming the image as displayed in step 3B (pg. 3; when the layer of second texture is overlayed on the protected image, and a blending operation is performed to blend the pixels of the second texture with the pixels of the protected image; pixels of second texture correspond to the pixels of A; pixels of the protected image corresponds to the pixels of B). Therefore, it would have been obvious to one of ordinary skill in the art at the time of present invention to use the Quick Mask mode icon as taught by Swanson into the Adobe Photoshop tool of Adobe because placing the stencil graphics onto the Quick Mask and painting away with Photoshop's Airbrush tool in Normal mode, the color will stay neatly trimmed inside of the stencil shape (pg. 2 Photoshop 2.5's Quick Mask feature).

29. Regarding claim 24, although Adobe teaches all of the claimed limitations as stated above, Adobe does not explicitly disclose that A comprises the second texture as modified in step (c). However, Swanson teaches that step (c) is performed prior to step (d), and so the second texture is already modified prior to the compositing operation performed in step (d). Please refer to the rejection of claims 1, 22, and 23 for further details.

30. Regarding claim 25, Adobe teaches that Photoshop is an interactive program that performs operations in real-time. Although Adobe teaches the claimed limitations as stated above, Adobe does not explicitly disclose step (c) and step (d) are performed substantially simultaneously. However, Swanson teaches that step (c) is performed

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prior to step (d). Therefore, it would have been obvious to one of ordinary skill in the art at the time of present invention to perform steps (c) and (d) as suggested by Swanson and use it into the interactive Photoshop program of Adobe because performing these steps substantially simultaneously helps the Photoshop program to perform in real-time.

31. Regarding claim 26, Adobe teaches the assigned scalar value (opacity value) of a pixel in the first texture (door layer) indicates a level of protection from 0% to 100% (50% is between 0% to 100%, pg. 138).

32. Regarding claim 27, Adobe teaches the level of protection is a nonzero value less than 100% (50% is less than 100%, pg. 138).

33. Regarding claim 28, Adobe teaches the level of protection relates to an opacity (reducing the opacity of the door layer allows other layers to show through it, i.e. if the door layer is opaque then it blocks all the layers that lie below it; pg. 138).

34. Regarding claim 29, Adobe teaches that working on an active layer does not affect the layers lying below it until they are blended for display (working with layers in Adobe Photoshop facilitates editing/deleting the current layer without affect the other layers; e.g. background garden image is one layer and the door image with white surrounding area is another layer; when removing the white area around the door, the background garden image layer is not affected) (pg. 131-137).

Although Adobe teaches all of the claimed limitations as stated above, Adobe does not explicitly disclose the protected image is unedited by the graphical input of step (b) until blending in step (d). However, Swanson teaches to blend the layer of the second texture, which is painted using the paintbrush tool (still the protected image

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layer is not affected by the second texture layer) with the protected layer of brick image by overlaying the second texture layer on the protected image layer, and thus finally forming the image as displayed in step 3B. Therefore, it would have been obvious to one of ordinary skill in the art at the time of present invention to use the Quick Mask mode icon as taught by Swanson into the Adobe Photoshop tool of Adobe because placing the stencil graphics onto the Quick Mask and painting away with Photoshop's Airbrush tool in Normal mode, the color will stay neatly trimmed inside of the stencil shape (pg. 2 Photoshop 2.5's Quick Mask feature).

35. Regarding claims 30, 31, 32 and 33, Adobe teaches to click on the eye icon to next to the background garden image layer to hide that layer so that only the door layer is the active layer. Then the user clicks on the magic eraser tool to erase the white area surrounding the door image. Again clicking on the eye icon of background garden image layer shows the garden image with the door image on top of it. Therefore, when the door image was edited, the background garden image was not affected.

Although Adobe teaches all of the claimed limitations as stated above, Adobe does not explicitly disclose that step (b) is performed following a first user signal, and step (d) is performed following a second user signal subsequent to the first user signal, and the graphical input in step (b) represents a plurality of paint strokes performed by the user between the first user signal and the second user signal. However, Swanson teaches to use a Photoshop program for painting and coloring the shapes using Photoshop's paint tools (pg. 3; the user hides the protected image layer by clicking (button click) on the eye icon next to it (first user signal), at this point the second texture

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layer is the active layer; then the user paints and colors using a paint brush (plurality of brush strokes), and clicks on the eye icon of the protected image (second user signal) to make it visible). Therefore, it would have been obvious to one of ordinary skill in the art at the time of present invention to perform user-interactive actions as taught by Swanson and use it into the Photoshop program of Adobe because such interactive program allows to paint with reckless abandon as all the color is trimmed neatly inside the original shape (pg. 3).

36. Regarding claim 34, Adobe teaches that the first texture represents at least one user-selected region of the image (white area surrounding the door is selected when the user clicks on the door image layer, pg. 136).

37. Regarding claim 35, Adobe teaches a method of blending a brush stroke (blur tool brush) into a target image (smoothing out the color transitions of the highlight layer), the method comprising the step of receiving data (selecting the tool brush and setting its mode and strength properties; also the opacity value of the highlight layer is received) from a graphical user interface (tool options bar) corresponding to a brush stroke (blur tool brush); for each of at least a plurality of pixels of a scratch texture (when selecting the brush, the texture attached with the brush by selecting the texture option corresponds to the scratch texture, pg. 167; here since the blur tool brush is selected, the texture attached with it is the scratch texture) comparing a candidate scalar value from received data (opacity value of the highlight layer) to an existing scalar value at a corresponding pixel of the scratch texture (opacity value of the paint from the blur tool brush; pg. 223-225, the opacity of the highlight layer is checked and if

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it is transparent, then those transparent pixels will be unaffected, but if it is not transparent then it is compared with the opacity value of the blur tool brush to determine the blending factor); and assigning the candidate scalar value to the corresponding pixel of the scratch texture only if the candidate scalar value exceeds the existing scalar value (when the opacity of the highlight layer is set to transparent, it is assigned to the blur tool brush so that that pixel of the highlight layer is unaffected), and blending the scratch texture (texture attached with the blur tool brush) into a target image (blending the highlights and shadows in the highlight layer using the blur tool brush; here second texture is the target image) (pg. 167, 223-225)

38. Regarding claim 36, the statements presented above, with respect to claims 35 and 8, are incorporated herein.

39. Regarding claim 38, the statements presented above, with respect to claims 35 and 7, are incorporated herein.

40. Regarding claim 40, the statements presented above, with respect to claims 35 and 9, are incorporated herein.

41. Regarding claim 41, the statements presented above, with respect to claims 35, 40 and 10, are incorporated herein.

42. Regarding claim 42, the statements presented above, with respect to claims 1, 2 and 13, are incorporated herein.

43. Regarding claim 43, the statements presented above, with respect to claims 42 and 30, are incorporated herein.

44. Regarding claim 44, the statements presented above, with respect to claims 43 and 31, are incorporated herein.

45. Regarding claim 45, the statements presented above, with respect to claims 44 and 32, are incorporated herein.

46. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Adobe and Swanson, and further in view of Schoelkopf et al. (US 7,120,293 B2; hereinafter referred to as Schoelkopf).

47. Regarding claim 37, Adobe teaches to use a blur tool brush to blur the image (and thereby it's pixels) (pg. 225). Although the combination of Adobe and Swanson teach the claimed limitations as stated above, they do not explicitly teach that the received data represents the brush stroke as a plurality of pillboxes. However, Schoelkopf teaches to use a pillbox function to represent the brush strokes that blur the pixels in the blurring process (col. 17 lines 35-45). Therefore, it would have been obvious to one of ordinary skill in the art at the time of present invention to use a pillbox function as taught by Schoelkopf into the interactive Photoshop program of Adobe and Swanson because pillboxes are weighted average of the nearby pixels and averaging decreases the local contrast in an image (col. 17 lines 35-45).

48. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Adobe and Swanson, and further in view of Brown (US 5,977,981).

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49. Regarding claim 39, although the combination of Adobe and Swanson teach the claimed limitations as stated above, they do not explicitly teach a scalar value assigned to a pixel of a scratch texture within the transition region is a function of a distance of the pixel from the edge of the paint stroke. However, Brown (col. 3 lines 43-55) teaches to determine the opacity profile of the edges of an object (pixel of the scratch texture) by determine the pixel distance from the central portion of an edge to the exterior portion of an edge (distance of the pixel from an edge of the paint stroke). Therefore, it would have been obvious to one of ordinary skill in the art at the time of present invention to use the pixel distance as taught by Brown to determine the scalar values of the texture used by Adobe and Swanson because the pixel distance is used to define a number of different monotonically increasing opacity levels, each preferably one pixel wide (col. 3 lines 46-48).

Allowable Subject Matter

50. Claim 17 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

51. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 19, the prior art of reference fails to show attenuating a value of a pixel in the protected image subject to a minimum RGB α alpha value, where the minimum alpha value is determined using the first texture.

References Cited

52. The following prior arts are made of record and not relied upon is considered pertinent to applicant's disclosure.

- Louveaux et al. (US 7,102,651 B1)
- Cohen et al. (US 6,337,925 B1)
- Levene et al. (US 2005/0093874 A1)
- Yuan (US 2006/0221094 A1)
- Hollis et al. (US 2003/0184556 A1)


53. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jwalant Amin whose telephone number is 571-272-2455. The examiner can normally be reached on 9:30 a.m. - 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Zimmerman can be reached on 571-272-7653. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

J.A. 11/15/06


MARK ZIMMERMAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600